

# Notice of Allowability

Application No.

10/049,749

Examiner

Nashmiya S. Fayyaz

Applicant(s)

SHEPPARD ET AL.

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment of 5/9/05.
2. ☒ The allowed claim(s) is/are 1-13 and 15-18.
3. ☒ The drawings filed on 04 January 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 7/18/05.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jody DeStefanis on July 14, 2005.

The application has been amended as follows:

#### Listing of Claims:

Claim 1 (currently amended): A system for making measurements in a wellbore and communicating data representing the measurements ~~to the surface~~ out of the wellbore comprising:

a sensor for making measurements in the wellbore; and  
a housing comprising a plurality of separable passive data receptors to which data acquired by the sensor is transferred, ~~and which are releasable~~ said data receptors being released in the wellbore, after data transfer, from the housing.

Claim 2 (currently amended): A system according to claim 1, wherein the sensor is electrically connected to an electronic memory within each of said plurality of separable ~~the passive data receptors~~ which stores the acquired data, the electrical connection being broken prior to or during release of each of said plurality of separable ~~the passive data receptors~~ from the housing.

Claim 3 (currently amended): A system according to claim 1, wherein the ~~sensing apparatus~~system further comprises an actuatable port, openable to release the separable passive data receptors.

Claim 4 (currently amended): A system according to claim 2, wherein each of said plurality of the separable passive data receptors ~~each~~comprises a rigid casing with a sealable aperture, the casing surrounding ~~each~~the electronic memory and ~~each~~the electrical connection passing through the sealable aperture.

Claim 5 (currently amended): A system according to claim 4, wherein the sealable aperture of each rigid casing is formed by an aperture surrounded by a sealing material, with the sealing material being heat treatable within the housing so as to provide after the electrical connection is broken a fluid-tight seal which is continuous with the surface of ~~each~~the rigid casing.

Claim 6 (previously presented): A system according to claim 1, wherein the passive data receptors are spherical.

Claim 7 (previously presented): A system according to claim 6, wherein each passive data receptor comprises two hollow metal hemi-spheres, joined by a plastics seal to form a sphere.

Claim 8 (previously presented): A system according to claim 1, wherein the housing and outer casings of the passive data receptors are formed from plastics material or metal.

Claim 9 (previously presented): A system according to claim 1, wherein the passive data receptors are configured to be either neutrally buoyant or buoyant, in relation to fluids within the wellbore.

Claim 10 (previously presented): A system according to claim 1, wherein the passive data receptors have a diameter in the range of 1 to 10cm.

Claim 11 (previously presented): A system according to claim 1, wherein the passive data receptors have a diameter in the range 1 to 5cm.

Claim 12 (previously presented): A system according to claim 1, wherein the data is encrypted prior to transfer to the passive data receptors.

Claim 13 (previously presented): A method of acquiring data from downhole, comprising the steps of:

- placing downhole a system comprising a sensor and a number of separable passive data receptors;
- making measurements using the sensor;
- transferring data representing the measurements to the passive data receptors; and
- releasing the passive data receptors to carry the data from downhole to the surface.

Claim 14 (canceled).

Claim 15 (previously presented): A system according to claim 1 wherein the sensor is located within the housing and the sensor is adapted make measurements while the housing descends into the wellbore.

Claim 16 (previously presented): A system according to claim 15 wherein the housing is a robotic logging device.

Claim 17 (previously presented): A system according to claim 16 wherein the robotic logging device is autonomously powered.

Claim 18 (previously presented): A system according to claim 15 wherein the housing is attached to a wireline.

Claim 19 (canceled) A robotic device for communicating measurements taken in a wellbore, comprising:

- a body having a propeller and electrical components; and
- a plurality of batteries that supply electrical energy used to power the propeller.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashmiya S. Fayyaz whose telephone number is 571-272-2192. The examiner can normally be reached on Mondays and Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on 571-272-2208.

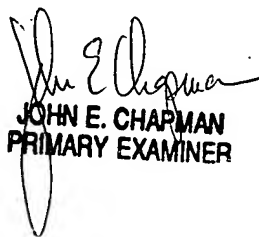
The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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nf  
7/18/05



JOHN E. CHAPMAN  
PRIMARY EXAMINER